DATE: March 7, 2003

TO: Regional Directors, Regions 1, 2, 3, 4 and 5
Regional Design Engineers, Regions 1, 2, 3, 4 and 5
Regional Planning & Program Managers, Regions 1, 2, 3, 4 and 5

FROM: Mary E. Ivey, Acting Director, Environmental Analysis Bureau

SUBJECT: FINAL PROGRAMMATIC SECTION 4(F) EVALUATION
FOR NATIONAL REGISTER OF HISTORIC PLACES LISTED OR
ELIGIBLE BRIDGES OVER THE NEW YORK STATE CANAL SYSTEM

Attached is the Final Programmatic Section 4(f) Evaluation for Bridges over
the National Register of Historic Places listed or eligible New York State
Canal System which has been signed by Robert Arnold, Division Administrator
for the New York Division of the Federal Highway Administration.

As indicated, this Programmatic Section 4(f) is applicable when a
transportation project will replace, using Federal transportation funds, a bridge
which is eligible for or listed on the National Register of Historic Places over
the Historic New York State Canal System. The Programmatic Section 4(f) is
to be used in conjunction with the April 16, 2001 Programmatic Agreement
for Bridges over the New York State Canal System which was executed under
the National Historic Preservation Act of 1966 and must include all possible
planning to minimize harm resulting from the use of a bridge. The Section
106 evaluation of alternatives and documentation prepared for a bridge project
over the New York State Canal System shall serve as the material needed for
the FHWA finding that there are no prudent and feasible alternatives to the
use of the bridge.

If you have any questions, please contact Bob Ewing or me at (518) 457-5672.
MEURLE
Attachments

CC: P. T. Wells, Office of Engineering, 5-504 MC 0504
Regional Structures Engineers, Regions 1, 2, 3, 4 and 5
Regional Maintenance Engineers, Regions 1, 2, 3, 4 and 5
Regional Landscape Environmental Managers, Regions 1, 2, 3, 4 and 5
Regional Cultural Resource Coordinators, Regions 1, 2, 3, 4 and 5
G. A. Christian, Acting Director, Structures Division, 5-6th Fl. MC 0473
DEPARTMENT OF TRANSPORTATION

Federal Highway Administration

Final Programmatic Section 4(f) Evaluation and Approval for Federal Highway Administration (FHWA) projects that necessitate the use of bridges over the National Register of Historic Places (NRHP) listed or eligible New York State Canal System (Historic Canal System).

This statement sets forth the basis for a Programmatic Section 4(f) evaluation and approval that there are no feasible and prudent alternatives to the use of bridges eligible for or listed on the NRHP (Historic Bridges) over the Historic Canal System to be replaced with Federal transportation funds and that the projects include all possible planning to minimize harm resulting from such use. This Programmatic 4(f) evaluation satisfies the requirements of Section 4(f) for all projects that meet the applicability criteria listed below. No individual Section 4(f) evaluation needs to be prepared for such projects. This approval is made pursuant to Section 4(f) of the Department of Transportation Act of 1966, 49 U.S.C. 303, and Section 18(a) of the Federal-Aid Highway Act of 1968, 23 U.S.C. 138.

Use

This Programmatic 4(f) evaluation is to be used in conjunction with 36 CFR Part 800 Programmatic Agreement for Bridges over the New York State Canal System (Canal Agreement) executed April 16, 2001. The Canal Agreement satisfies the Section 106 requirements for canal bridge projects developed and agreed to by the FHWA, The New York State Department of Transportation (NYSDOT), the State Historic Preservation Officer (SHPO), and the Advisory Council on Historic Preservation (ACHP). The evaluation of alternatives and documentation prepared for the Section 106 process shall be used as the basis for the FHWA finding that there are no prudent and feasible alternatives to the use of the affected bridge on the Historic Canal System.
The resources covered by this programmatic Section 4(f) evaluation include Historic Bridges which are eligible for the NRHP as contributing elements to the Historic Canal System. Though these Historic Bridges are on the Historic Canal System, they must perform as an integral part of a modern transportation system. When they do not or cannot, they must be replaced in order to assure public safety while maintaining system continuity and integrity. For the purpose of this Programmatic Section 4(f) Evaluation, a proposed action will constitute a “use” of a Historic Bridge that is on the Historic Canal System when the action will have an adverse effect as applied by the requirements of Section 106 of the National Historic Preservation Act (NHPA) and 36 CFR Part 800. Rehabilitation of a Historic Bridge will rarely constitute an adverse effect on the Historic Canal System.

**Applicability**

This Programmatic Section 4(f) Evaluation may be applied by the FHWA to projects or approvals which meet the following criteria:

1. The Historic Bridge is to be replaced or rehabilitated with Federal funds.

2. The project will require the use of a Historic Bridge that is on the Historic Canal System.

3. The project will have an adverse effect on Historic Bridges and/or the Historic Canal System.

4. The Bridge is not a National Historic Landmark.

5. The project will not impact any areas of archeological sensitivity that have the potential to yield sites containing important research information. If a site exists, it does not warrant preservation in place as: 1) it is not considered valuable for its permanent in-situ public interpretive value, 2) the technology exists for satisfactory data recovery (even if data recovery is not determined appropriate treatment at this time), 3) the site has no traditional cultural significance to Indian tribes, and 4) the site does not contain
or is unlikely to contain human remains, funerary objects, sacred objects or items of cultural patrimony as defined by the Native American Graves Protection and Repatriation Act of 1990.

6. The FHWA Division Administrator determines that the facts of the project match those set forth in the sections of this document labeled Alternatives, Findings, and Measures to Minimize Harm.

7. Agreement among the FHWA, NYSDOT, the State Historic Preservation Officer (SHPO), and the Advisory Council on Historic Preservation (ACHP) has been reached through the Programmatic Agreement for Historic Bridges over the Historic Canal System or individually through procedures pursuant to Section 106 of the NHPA.

Alternatives

The following alternatives avoid any use of the historic resource:

1. Do nothing.

2. Replacement of the same design type (i.e. build a new truss bridge to replace a truss bridge that is not individually eligible on the NRHP.)

3. Build a new structure at a different location without affecting the integrity of the Historic Bridge, or the Historic Canal System as determined by the Canal Agreement or procedures individually implementing the NHPA.

4. Rehabilitation, including minor widening, of an existing bridge without affecting its visual characterization from the shore and the canal.

5. Removal of a bridge that does not contribute to the Historic Canal System.

6. Sale or transfer of ownership of a Historic Bridge with covenant to retain its character.
7. Rehabilitation of an individually eligible Historic Bridge without affecting the historic integrity of the bridge or of the Historic Canal System, as determined by the Canal Agreement or procedures individually implementing the NHPA.

This list is intended to be all-inclusive. The Programmatic Section 4(f) Evaluation does not apply if a reasonable alternative is identified that is not discussed in this document. The project record must clearly demonstrate that each of the above alternatives was fully evaluated and it must further demonstrate that all applicability criteria listed above were met before the FHWA Division Administrator concluded that the Programmatic Section 4(f) Evaluation applied to the project.

Findings

In order for this Programmatic Section 4(f) Evaluation to be applied to a project, each of the following findings must be supported by the circumstances, studies, and consultations on the project:

1. *Do Nothing.* The do nothing alternative has been studied. The do nothing alternative ignores the basic transportation need. For the following reasons this alternative is not feasible and prudent:

   a. Maintenance - The do nothing alternative does not correct the situation that causes the Historic Bridge to be considered structurally deficient or deteriorated. These deficiencies can lead to sudden collapse and potential injury or loss of life. Normal maintenance is not considered adequate to cope with the situation.

   b. Safety - The do nothing alternative does not correct the situation that causes the Historic Bridge to be considered deficient. Because of these deficiencies the bridge poses serious and unacceptable safety hazards to the traveling public or places intolerable restriction on transport and travel.
2. **Build on New Location Without Using the Historic Bridge.** Investigations have been conducted to construct a bridge on a new location or parallel to the Historic Bridge (allowing for a one-way couplet), but for one or more of the following reasons, this alternative is not feasible and prudent:

a. **Terrain** - The present bridge structure has already been located at the only feasible and prudent site, i.e., a gap in the land form, the narrowest point of the river canyon, etc. Construction of a new bridge at another site will result in extraordinary bridge and roadway approach costs, extraordinary difficulty of construction, and/or extraordinary disruption to established traffic patterns.

b. **Adverse Social, Economic, or Environmental Effects** - Building a new bridge away from the present site would result in social, economic, or an environmental impact of extraordinary magnitude. Impacts, such as, extensive severing of productive farmlands, displacement of a significant number of families or businesses, serious disruption of established travel patterns, and access and damage to wetlands may individually or cumulatively weigh heavily against relocation to a new site.

c. **Engineering and Economy** - Where difficulty associated with the new location is less extreme than those encountered above, a new site would not be feasible and prudent where cost and engineering difficulties reach extraordinary magnitude. Factors supporting this conclusion include significantly increased roadway and structure costs, serious foundation problems, or extreme difficulty in reaching the new site with construction equipment. Additional design and safety factors to be considered include an ability to achieve minimum design standards or to meet requirements of various permitting agencies such as those involved with navigation, pollution, and the environment.

d. **Preservation of the Historic Bridge** - It is not feasible and prudent to preserve the existing bridge, even if a new bridge were to be built at a new location. This could occur when the historic bridge is beyond rehabilitation for a transportation or an alternative use, when no responsible party can be located
to maintain and preserve the bridge, or when a permitting authority requires removal or demolition of the Historic Bridge.

3. Rehabilitation without affecting the historic integrity of the bridge. Studies of rehabilitation measures have been conducted, but, for one or more of the following reasons, this alternative is not feasible and prudent:

   a. The Historic Bridge is so structurally deficient that it cannot be rehabilitated to meet minimum acceptable load requirements without affecting the historic integrity of the bridge.

   b. The Historic Bridge is seriously deficient geometrically and cannot be widened to meet the minimum required capacity of the highway system on which it is located without affecting the historic integrity of the bridge. Flexibility in the application of the American Association of State Highway and Transportation Officials geometric standards should be exercised as permitted in 23 CFR Part 625 during the analysis of this alternative.

Measures to Minimize Harm

This programmatic Section 4(f) evaluation and approval may be used only for projects where the FHWA Division Administrator, in accordance with this evaluation, ensures that the proposed action includes all possible planning to minimize harm. This has occurred when:

1. For bridges that are to be rehabilitated, the historic integrity of the bridge is preserved, to the greatest extent possible, consistent with unavoidable transportation needs, safety, and load requirements.

2. FHWA ensures that, in accordance with the Canal Agreement, the Historic American Engineering Record (HAER) standard records appropriate for documentation of the bridges are prepared for bridges that are removed, demolished, or are rehabilitated to the point that the historic integrity is affected.
3. For bridges that are to be replaced, the existing bridge is made available for an alternative use, provided a responsible party agrees to maintain and preserve the bridge; and

4. For bridges that are adversely affected, agreement among the NYSDOT, SHPO, and FHWA, is reached through the Canal Agreement, or through procedures individually implementing the NHPA, on measures to minimize harm and those measures are incorporated into the project. This Programmatic Section 4(f) Evaluation does not apply to projects where such an agreement cannot be reached.

**Procedures**

This Programmatic Section 4(f) Evaluation applies only when the FHWA Division Administrator:

1. Determines that the project meets the applicability criteria set forth above;

2. Determines that all of the alternatives set forth in the findings section have been fully evaluated;

3. Determines by use of the findings in this document that there are no feasible and prudent alternatives to the use of the historic bridge;

4. Determines that the project complies with the Measures to Minimize Harm section of this document;

5. Assures that implementation of the measures to minimize harm is completed;

6. Documents in the project file that the Programmatic Section 4(f) Evaluation applies to the project on which it is to be used and;

7. Insures that the provisions of the Canal Agreement are followed to protect the integrity of the Historic Bridge and Historic Canal System.
Coordination

The Programmatic Agreement concerning Historic Bridges over the Historic Canal System was coordinated with the New York State Department of Transportation and the New York State Historic Preservation Officer. Pursuant to Section 4(f), this Programmatic Agreement was coordinated with the New York State Department of Transportation, the New York State Canal Corporation, and Departments of the Interior, Agriculture, and Housing and Urban Development.

Before applying this programmatic evaluation to projects requiring an individual bridge permit, the Division Administrator shall coordinate with the U.S. Coast Guard District Commander.

Date:  

Approved.

Robert Arnold, Division Administrator

New York Division

Federal Highway Administration